

CLAIMS

1. A method for identifying and/or making compounds for use in reducing and/or preventing fibrosis, comprising the steps:
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- (a) providing a CTGF receptor;
- (b) providing a test sample;
- 10 (c) providing a CTGF receptor agonist;
- (d) exposing the CTGF receptor to the test sample;
- (e) subsequently or simultaneously exposing the CTGF receptor to the CTGF receptor agonist;
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- (f) detecting and/or measuring the amount of CTGF receptor activation;
- (g) comparing the amount of CTGF receptor activation in the presence of a test sample with the amount of CTGF receptor activation detected and/or measured in the absence of a test sample; and
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- (h) determining if a compound reduces and/or prevents fibrosis on the basis that it causes no increase or a decrease in CTGF receptor activation.
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2. The method of Claim 1 further comprising the step of:

(i) isolation of the compound capable of reducing and/or preventing fibrosis.

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3. The method of Claim 2 further comprising the step of

(j) formulating the isolated compound into a composition further comprising a pharmaceutically acceptable carrier, excipient and/or diluent.

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4. The method of any previous claim wherein CTGF receptor activation is measured and/or detected by detecting and/or measuring at least one of the following activities: CTGF receptor autophosphorylation; receptor-induced protein phosphorylation; and/or CTGF receptor induced TIEG expression.

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5. The method of any previous claim wherein the CTGF receptor agonist is CTGF.

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6. The method of any previous claim wherein the CTGF receptor is the TrkA receptor.

7. The method of any previous claim wherein the compound affects directly with the interaction between the CTGF receptor and an agonist thereof.

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8. The method of any of claims 1 to 6 wherein the compound affects indirectly with the interaction between the CTGF receptor and an agonist thereof.

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9. The method of any previous claim wherein the compound is a CTGF receptor antagonist.
- 5 10. A compound for use in the reduction and/or prevention and/or diagnosis of fibrosis characterised in that it inhibits and/or prevents CTGF receptor activation.
- 10 11. A compound identified and/or made by the method of any one of Claims 1 to 9 for use in the reduction and/or prevention and/or diagnosis of fibrosis.
- 15 12. A compound as claimed in either of Claims 10 and 11 which is at least one selected from polypeptides, antibody molecules, antisense nucleotides.
13. A compound as claimed in Claim 12 wherein the compound is an antibody molecule.
- 20 14. A compound as claimed in Claim 12 wherein the compound is a CTGF receptor antagonist.
- 25 15. Use of a compound identified and/or made by any of Claims 1 to 9 in the treatment and/or prevention and/or diagnosis of a fibrotic disease.
16. Use of a compound identified and/or made by any of Claims 1 to 9 in the manufacture of a medicament for the treatment and/or prevention and/or diagnosis of a fibrotic disease.

17. Use of a compound as claimed in either Claim 10 or 11 in the treatment and/or prevention and/or diagnosis of a fibrotic disease.
18. Use of a compound as claimed in either Claim 10 or 11 in the manufacture of a medicament for the treatment and/or prevention and/or diagnosis of a fibrotic disease.
19. A use as claimed in any one of Claims 15 to 18 wherein the fibrotic disease is selected from one or more diabetic nephropathy, non-diabetic kidney fibrosis, lung fibrosis, liver fibrosis (cirrhosis), skeletal muscle fibrosis, cardiac muscle fibrosis, atherosclerosis, systemic sclerosis, scleroderma, retinal fibrosis, radiation induced fibrosis keloid scar formation and cancer-associated fibrosis.
20. A use as claimed in Claim 19 wherein the disease is diabetic nephropathy.
21. A method of treating and/or preventing a fibrotic disease comprising administering a therapeutically or prophylactically effective dose, or plurality of doses, of a compound identified and/or made by the method of any of Claims 1 to 9.
22. A method of treating and/or preventing a fibrotic disease comprising administering a therapeutically or prophylactically effective dose, or plurality of doses, of a compound as claimed in any of Claims 10 to 14.
23. A method as claimed in either Claim 21 or 22 wherein the fibrotic disease is selected from one or more diabetic nephropathy, non-diabetic kidney fibrosis, lung fibrosis, liver fibrosis (cirrhosis),

skeletal muscle fibrosis, cardiac muscle fibrosis, atherosclerosis, systemic sclerosis, scleroderma, retinal fibrosis, radiation induced fibrosis keloid scar formation and cancer-associated fibrosis.

5 24. A method as claimed in Claim 23 wherein the fibrotic disease is diabetic nephropathy.

25. Use of an agent capable of binding to a CTGF receptor agonist in the treatment and/or prevention and/or diagnosis of a fibrotic disease.

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26. Use of an agent capable of binding to a CTGF receptor agonist in the manufacture of a medicament for the treatment and/or prevention and/or diagnosis of a fibrotic disease.

15 27. A use as claimed in Claims 25 or 26 wherein the fibrotic disease is selected from one or more diabetic nephropathy, no-diabetic kidney fibrosis, lung fibrosis, liver fibrosis (cirrhosis), skeletal muscle fibrosis, cardiac muscle fibrosis, atherosclerosis, systemic sclerosis, scleroderma, retinal fibrosis, radiation induced fibrosis keloid scar
20 formation and cancer-associated fibrosis.

28. Use of an agent capable of binding to a CTGF receptor agonist in a method of reducing and/or preventing binding of a CTGF receptor agonist to a CTGF receptor *in vivo* or *in vitro*.

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29. A use as claimed in Claims 26 to 28 wherein the agent capable of binding to a CTGF receptor agonist is a CTGF receptor.

30. A use as claimed in Claims 26 to 28 wherein the agent capable of binding to a CTGF receptor agonist is a CTGF receptor joined to the Fc-region of an immunoglobulin.
- 5 31. A use as claimed in Claims 29 or 30 wherein the CTGF receptor is the TrkA receptor.
32. A use as claimed in Claims 29 or 30 wherein the CTGF receptor is a soluble form of the TrkA receptor.
- 10 33. A nucleic acid encoding the TrkA receptor joined to an Fc-region of an immunoglobulin.
34. A vector containing a nucleic acid according to Claim 33.
- 15 35. A polypeptide comprising the TrkA receptor joined to an Fc-region of an immunoglobulin.
36. A cell containing a nucleic acid according to Claim 33 and/or a vector according to Claim 34 and/or a polypeptide according to Claim 35.
- 20 37. A pharmaceutical composition comprising a nucleic acid according to Claim 33 and/or a vector according to Claim 34 and/or a polypeptide according to Claim 35 and/or a cell according to Claim 36, and a pharmaceutically acceptable carrier or expipient, the nucleic acid and/or the vector and/or the polypeptide and/or the cell being present in an effective amount to treat and/or prevent and/or diagnose a fibrotic disease.
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